

forwarding larger and better specimens to Dr. Knight, and on his re-examination of them, he found the plant to be identical with the species named by Nylander (*supra*), which Lichen Dr. Knight had himself sent in 1868 from New Zealand to Nylander, and it was published by him in the "Flora," No. 5, 1869 (a French serial). Notwithstanding, from that work being so little known here (Dr. Knight, the original publisher of the plant, not having republished it), and the plant itself so fine and rare and new to us—with, also, some differences as to size, etc., between Dr. Nylander's and my own measurements and descriptions—I bring it now forward, together with Dr. Nylander's description, kindly transcribed for me by Dr. Knight, from the foreign botanical work above-mentioned.

"*Sphaerophoron stereocauloides*. Thallus ei pallidus v. albidus, dendroideo-ramosus, teres, (altit. 10–12 centimetrorum et trunco primario basi crassit. circiter 2 mm.) cortice sat conferte transversim supra diffracto, ramis et ramulis fibrillis teretibus, divisus vel ramosis conferte minutis; apothecia in receptaculis subglobosis inclusa; sporæ globosæ vel subglobosæ, diam. 0·008 ad 0·01 mm. Legit *Dr. Knight*."

ORDER VIII. FUNGI.

Genus 69. *Xylaria*, Fries.1. *Xylaria polytricha*, sp. nov.

Sub-succulent, fleshy, black and densely hairy; hairs rigid, patent. Stem 1 inch long, cylindrical, rather stout. Receptacle obovate, and spatulate, 6–7 lines long, 3–4 lines broad, thickish, margins sinuate above, tip obtuse, deeply and broadly grooved on one side, obtusely keeled on the other: some specimens are shortly 2-lobed at top, lobes cylindrical, tips round; others have a small obovate and sessile head, or lobe, springing laterally from stroma low down; perithecia not visible; hairs (*sub lente*) brown-black, lanceolate, twisted, acute.

Hab. On the earth among mosses, etc., at Glenross, near Napier; 1884: *Mr. D. P. Balfour*.

Obs. A species having affinity with *X. castorea*, Berk., originally discovered in forests in this same locality; and also with a few of Montagne's South American species.

ART. XXVIII.—A List of Fungi recently discovered in New Zealand.

By W. COLENSO, F.L.S.

[Read before the Wellington Philosophical Society, 1st October, 1884.]

LAST year (1883) I detected several peculiar and interesting Fungi in the woods and glens of the Seventy-mile Bush, Waipawa County, that were new to me; these, with a few others already known but rare, I exhibited at

two of the ordinary meetings of the Hawke's Bay Philosophical Institute held in 1883; and although I knew the genera of some of them, yet in order the better to ascertain their generic and specific distinctions and positions in this very intricate *Order* of plants, I forwarded specimens to Sir J. D. Hooker at Kew. From him I have lately received a list of them, kindly drawn up by that eminent fungologist, Dr. Cooke, which list I now give, together with a few brief and plain popular notes concerning those species now for the first time found in this country.

And here I may observe, that out of 26 distinct species forwarded in this little lot to Kew, 21, belonging to 20 genera, have been now detected in New Zealand; yet of these no less than 19 species are known from other countries, mostly the Old World; so that there are only two really new species in the whole lot!

This circumstance, however, is neither strange nor unexpected; for in the *Annales des Sciences Naturelles* an account has been given by M. Montagne of the Fungi transmitted from Juan Fernandez by Bertero, consisting of 56 species; of these there is scarcely more than a third which are not referable to well-known European species,—and only one which requires the formation of a new genus for its admission. So, also, of those numerous species of Fungi described by Sir J. D. Hooker in the “*Handbook of the New Zealand Flora*,” a large proportion of them are European and cosmopolitan.

Sir J. D. Hooker, in his accompanying letter to me, remarks on this curious incident, saying:—“While many of them are already well-known to science from other countries; on the other hand, almost all the species you have now sent are new to the islands of New Zealand, and thus give an idea how vast a number of widely distributed forms remain to be collected.”

1. *Polyporus exiguus*, sp. nov.

A small semi-stipitate flabellate whitish fungus, of horizontal growth, among mosses, on the bark of old trees near their bases; wet woods near Norsewood, Waipawa County; 1883: *W.C.*

2. *P. fomentarius*, Fr.

This species of fungus is the real *Amadou* or German Tinder, and is very generally distributed over the globe. Berkeley says of it (*Introduction to Crypt. Botany*) that “it is one of the few undoubted instances of fungus occurring in a fossil state. . . . In the Kew Museum a British specimen may be seen together with one from Sikkim, the accordance of the two being quite perfect” (p. 252). Again: “*P. fomentarius* not only supplies *Amadou*, but has been manufactured into coarse clothing” (p. 364). And, such being the case, it almost leads me to doubt the specific identity of the New Zealand plant, because this plant is excessively hard and tough to cut

or break—requiring an axe; and while it grows to a tolerably large size, 5–7 inches, flat, irregular, and overlapping (*stratum super stratum*), it is not very thick; evidently of slow growth, perennial and aged, of a bright yellow-brown colour, and somewhat resembling a slab or cake of gingerbread. Owing to its excessive hardness, I could only with my knife secure a small portion as a specimen. On trunks of *Fagus solandri*, but not common; dry hilly woods near Norsewood; 1883: *W.C.*

3. *Hydnum alutaceum*, Fr.

A tawny prostrate effuse plant, growing in large patches on bark of trees; woods, with No. 1; 1883: *W.C.*

4. *Irpex zonatus*, B. and Br.

A small tawny-orange semi-stipitate sub-flabellate fungus, often gregarious and imbricate, and sometimes prostrate and effuse (apparently 2–3 vars.), growing among mosses and dead logs, same forests with the preceding (Nos. 3 and 1); 1883: *W.C.*

5. *Stereum lugubris*, sp. nov., Cooke.

This is a most peculiar and elegant plant; pileus 1–3 inches broad, sessile, lateral, thin, ruffled, and zoned above with alternate grey and black bands, growing profusely and closely imbricated, sub-horizontal and pendulous—resembling small epaulettes,—a pretty sight. On dead trunk of *Fagus solandri*, in river bed (high and dry) near Norsewood; but though very plentiful there, only noticed on that one tree*; 1883: *W.C.*

6. *Dictyonema æruginosa*, Ag.

A small effuse horizontal species, over-running mosses, etc., belonging to a curious and tropical genus, long considered to be an *Alga*. In woods, with Nos. 1 and 2; 1883: *W.C.*

7. *Cyphella discoidea*, Cooke.

A small circular fungus adnate on long-rooted cat's-ear (*Hypochæris radicata*), in fields, Napier; 1881–83: *W.C.*

8. *Clavaria acuta*, Sow.

A curious minute stipitate white clavate fungus, growing in little patches among *Hepaticæ*, but not common; on earth, sides of shady cuttings near Norsewood; 1883: *W.C.*

9. *Tremella albida*, Huds.

A small erect white foliated gregarious fungus, gelatinous when fresh; on rotten logs, in wet dark woods near Norsewood; 1883: *W.C.*

10. *Puccinia malvacearum*, Corda.

On leaves of mallow (*Malva sylvestris*), in my paddock, Napier; 1881–83: *W.C.*

* As this is a species nova, and possibly but little known here among us, I may remark that, in form and appearance, it is much like those *sp. nov.* of the same genus from Queensland, recently described by Berkeley and Broome in "Transactions Linn. Soc. London," 2nd series, Botany, and figured in tab. 46, vol. i., and in plate 14, vol. ii.

11. *Tilmadoche nutans*, Pers.

A curious minute simple stipitate fungus bearing a globular head of perithecia, having a greyish semi-metallic appearance when fresh and before bursting; growing in small patches among *Hepaticæ*, etc., on rotten logs, open skirts of woods near Norsewood; 1882: *W.C.* Glenross; 1883: *Mr. D. P. Balfour*.

12. *Aspergillus glaucus*, Lk.

On fruit of black currant (*Ribes nigrum*); gardens, Waipukurau; 1882–83: *W.C.*

13. *Fusisporium miniatum*, B. & C.

A minute cinnabar-red fungus, sessile, gregarious in round dots, on dead logs of *Fagus solandri*, in river-bed near Norsewood; 1883: *W.C.*

14. *Peziza (Hymenoscypha) scutula*, P.

A minute stipitate fungus, parasitical on leaf of *Knightia excelsa*; wet woods with No. 9; (apparently very scarce); 1883: *W.C.*

15. *Solenia candida*, Fr.

A peculiar looking small horizontal effuse scurfy whitish fungus, full of transverse fissures, spreading on rotten logs; woods, with preceding; 1883: *W.C.*

16. *Xylaria filiformis*, Fr.

An extraordinary plant! at first horizontal, of effuse pink or pink-red hyssoid growth, and forming vermicular-like markings, adhering closely to dead leaves (matrix); afterwards erect long wiry black and flexuose (like stout hairs), bearing large moniliform perithecia: originally found on west flank of Ruahine mountain range, emerging from dead leaves of *Coriaria ruscifolia*, but barren; 1850: *W.C.*: and in fruit at Glenross; 1883: *Mr. D. P. Balfour*.

17. *Sphærostilbe cinnabarina*, Tul.

A minute orange-red circular and convex sessile fungus, found growing gregariously in little scattered masses about roots of living trees, woods near Norsewood; a curious and elegant plant; 1883: *W.C.*

18. *Valsa (Fuckelia) turgida*, Fr.

A peculiar looking large prostrate spreading whitish fungus, the stroma (resembling the crustaceous thallus of a lichen of the *Graphidei* tribe) having scattered dark-umber linear perithecia, 1–2 lines long, erumpent and bursting; on the bark of a dead tree, dry hilly woods near Norsewood; (only one large patch noticed); 1883: *W.C.*

19. *Antennaria scoriadea*, B.

This peculiar fungus assumes two forms:—1. When young, spreading in long dark ribbon-like lines over mosses, etc., as if laid on with a brush; very plain when wet but scarcely visible when dry: 2. On bark of living

trees, bristly, black, horizontal, 1-1½ inches long, of dense bushy growth, perennial, bearing moniliform fruit. Woods near Norsewood, also near Matamau; 1883: *W.C.*

20. *Hemiarcyria serpula*, Rtfi.

This is a most curious small fungus; a substance that, at first sight, might well be taken for some small smooth worm, coiled up and hibernating; it is orange-coloured, smooth, vermicular (in size, like small pieces of vermicelli, or coloured silk cord), soft and tender, so as to make it difficult to preserve a good specimen. Found under large foliaceous lichens (*Stictæ*), on rotten logs, dry elevated woods near Norsewood; (but scarce); 1883: *W.C.*

21. *Chroolepus aureum*, Ag.

A curious small reddish woolly convex and spreading fungus, forming little cushions, adnate on lichen (*Thelotrema*) on bark of living *Dacrydium cupressinum*; forest between Matamau and Danneverke, Waipawa County; 1883: *W.C.* (N.B.—The colour changes to light green in drying and keeping.)

The following more or less rare Fungi (but already collected in New Zealand, see "Handbook of the New Zealand Flora"), were also in the lot, viz.:—

Polyporus australis, Fr.

Thelephora pedicellata, Schw.

Stereum lobatum, Kze.

Guepinia spathularia, Fr.

Secotium erythrocephalum, Tul.

ART. XXIX.—Description of new Species of Native Plants.

By D. PETRIE, M.A.

[Read before the Otago Institute, 11th November, 1884.]

Coprosma rubra, n. sp.

A LAXLY or densely branched shrub, 4-10 feet high; branches slender divaricating, marked by numerous transverse rings; bark of younger branches reddish-brown, smooth; the ultimate twigs pubescent.

Leaves variable in size, $\frac{1}{4}$ - $\frac{3}{4}$ inch long, $\frac{1}{6}$ - $\frac{1}{2}$ inch wide, rounded-oblong, acute, thin, pale below, veins and reticulations evident, narrowed into a rather long flat glabrous petiole.

Stipules minute,